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VIA REGULATIONS.GOV

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Subject: Request For Public Comment on
Proposed Rule 47 CFR Parts 1, 74, and 101 / Response to
FCC-2010-0248-0001 [WT Docket Nos. 10-153; 09-106; 07-121; FCC
10-146]

To the Commissioners of the Federal Communications Commission,

This letter is a response to the proposed rule changes to "Microwave for Wireless Backhaul." I am the Chief Executive and Visionary Officer of Mimvi, Inc. ("Mimvi"). Mimvi is the international leader in mobile web and application search indexing. We currently provide our customers with detailed search and recommendation for content and software available to mobile phones and tablets. We provide mobile network and hardware vendor independent results, and for this reason, a healthy, strong and fair wireless backbone infrastructure is critical to our business, as well as the satisfaction of US citizens. Having a large and well indexed database of heterogeneous mobile data gives us a unique view into the challenges that face the mobile data communications industry both today and tomorrow.

We applaud the FCC's decision to revise the current rules to more effectively use the frequency space, and would like to provide commentary from our perspective as an industry leader in mobile content indexing. Our business model relies on diversity of content, as well as solid communications and common infrastructure so that we may provide reliable and useful search and recommendations for our users. We do not favor any particular vendor of communications services. While we do monitor the short term trends in the market today, we wish to

assist in providing insight into where mobile communications are heading, regardless of who the vendors will be tomorrow.

Mimvi's Vision of Implementation in The New Mobile World:

There are many hard facts that limit our vision of a fully mobile internet. While handheld display and processing technologies continue to grow, connectivity remains the biggest issue. Trenching cable is still expensive, and the wireless communications spectrum space remains a constant; we don't expect to see any changes soon. In following the FCC's plan to maximize available bandwidth, we feel it appropriate to mention that decentralizing data processing and storage is a necessity. While Plain Old Telephone Service ("POTS") phone calls and Internet Protocol ("IP") level routing are facilitated in Points of Presence ("POP") for single carriers, many exchanges between carriers do not occur until they reach an urban center, which we find to be a non-optimal use of bandwidth. Because the FCC is proposing the use of Fixed Auxiliary Stations, we feel it an appropriate time to introduce our concept of Auxiliary Station Data Centers.

The technologies we see growing in the next few years are: **IP, VoIP, IPTV, MPEG-7, SaaS and localized data services**. We feel that because of this, Auxiliary Stations are critical pieces of infrastructure.

An Auxiliary Station can do much more than simply translate transmission frequencies. We now have cheap computational power and storage, low cost off-the-grid power plants and subterranean cooling systems. Systems like this are already in deployment. These technologies can be leveraged to minimize data use, by creating small intelligent software neutral data centers in the field. These centers can act not only for caching and compression, they can also be used to maintain urban POP services in rural areas which lose their wireless backhaul communications links more easily than urban centers. They can also be used to provide and host local data communications services which have no or little need to communicate outside the area.

Normal Use When Primary Link is Fully Functional	Abnormal Use Due To Primary Link Failure or Fade
Localized "Cloud" Services	Emergency Data Services Aggregate
Local Search Indexing, Query and Recommendation	VoIP Telephony Continuation Of Local Enhanced Voice Services
VoIP Routing / Conference Compression	Continuity of Electronic Government Services
Software as a Service ("SaaS") node	Continuity of Fixed Wireless Data Cluster Web Services
Transparent Data Cache	
IPTV relay	
General Colocation Services	
Backhaul Signal Routing	

Figure 1: Examples of Fixed Auxiliary Station Data Center Use by Link Mode

We also would like to comment that micro data centers like these can be of the absolute most benefit by being nearby, but not attached to the physical location of a major backhaul tower. The ideal conditions for a data center are cool (most likely partially underground), seismically stable, easy to access and with lots of wind, hydro or solar power... Nearly the inverse of a good backhaul tower location. We do however, believe that Time Division Multiplex of the same signal to and from the main link tower, would be the cheapest implementation of these services, and we also expect to see one particular engineering pattern become popular. For example, towers on hills, and micro data centers ("Auxiliary Stations" for the purposes of this document) in a neighboring valley

Silicon hardware gets cheaper, faster, and more energy efficient by the day. Separation from the primary link provides citizens of the United States much more flexibility in

exercising their connectivity options, especially in the mobile sector. We know that this engineering pattern will continue to emerge, but we want to see it grow quickly. We feel that by reusing similar radio equipment for the primary links as well as the auxiliary links will expedite the transition process. We don't expect to see shared frequency usage except when alternatives are more expensive, or when the link is experiencing abnormal operation, as the goal of the backhaul provider lies in maximizing their link potential.

Attached to this commentary are 3 exhibits.

Exhibit A is an example wireless / wired network topography for a rural area. In this idealized model, you can see how local services running on Auxiliary Stations can be used to both preserve a network route if needed, and provide services if there is a major outage.

Exhibit B is an example of an absolute minimal cost Auxiliary Station Data Center which would be able to handle a large number of users in the event of an outage. In most cases, we expect the data center segment of the Auxiliary Station to be buried. We leave it above ground to show how cheap and easy to acquire the materials to build a very effective data hub really are. Each one can easily service tens of thousands of users during both normal backhaul operation and during outages.

Exhibit C is an example of how deployment of Auxiliary Station Data Centers can provide continuity of services between neighboring communities during a primary link segment outage.

About Mimvi:

If you are an owner of a smartphone, you'll understand the frustrations with trying to find the right Mobile App. Mimvi, a pure-play search and recommendation engine, addresses this issue. It enables consumers to quickly discover Mobile Apps, Mobile Content and Mobile Products across all devices and platforms, including: Apple's iPhone, Google Android, Blackberry, Windows and Nokia devices.

To provide some insight into the magnitude of the Mobile Apps opportunity, the demand for Mobile Apps is increasing at an unprecedented rate. By 2015, it is estimated that users will annually consume more than more than 25 billion Mobile Apps.

Ultimately, Mimvi anticipates hundreds of billions of searches will be conducted through its unified search platform, enabling people around the world to find relevant Mobile Apps, Mobile Content and Mobile Products—from China through to Europe and beyond.

Mimvi's technology is based on proprietary search, recommendation and personalization algorithms. It was released in July, 2010.

Mobile applications are often served preprocessed content, due to limitations of data processing available on mobile devices. It is in our best interests to see the accessibility of this preprocessed content maximized, and we feel that this can be achieved rapidly with your proposed rule changes.

On the subject of "Permitting Greater Sharing Between FS Operations in Certain Broadcast Auxiliary Service ("BAS") and Cable TV Relay Service ("CARS") Frequencies":

The fundamental rules for these bands are based on the nature of the media at the time of the rules inception. In the past, these services have been primarily video and audio transmission, and the channel sizes are in proportion to this. As the final display device of broadcasting becomes increasingly capable of data reconstruction, we expect to see micro-data transmission from field sensors play a vital part in local information awareness, where previously news trucks would do 'on site' evaluations and broadcast. While we don't propose that an entire grid of temperature, power or seismograph sensors individually have a BAS designation, but we do suggest that the channelization scheme maintain some low bandwidth channels for aggregation of sensor grids, which can be picked up by broadcasters for redistribution.

We also see the value in large channel width for use in IP multicast distribution services for CARS. As the market is evolving in these areas, we suggest a channelization system which can evenly be broken apart as different broadcast types emerge, and decided in geographic areas based on need.

We do not have a specific scheme to propose, but do wish to comment that since video and audio are now digital streams, other types of broadcast data be respectfully integrated into

these services. We are looking forward to the transition to MPEG-7 services, and feel that by bringing an understanding of "broadcast services" to include not just video and audio, especially at the physical link layer, the transition will be smoother.

On the subject of "Eliminating Final Link Rule":

Overall, we defer to the qualifications of other commenters on this proposal. We do wish to propose that the final link rule be completely abandoned for licensed broadcaster use of unencrypted Multicast IPTV or Radio. We feel that if a signal is available locally, the need for its retransmission should be minimized.

On the subject of "Permitting Adaptive Modulation":

Mimvi's interest is in accessibility to all, and we feel that adaptive modulation will permit better accessibility.

While we support maximizing frequency use, we do understand that there is a delicate balance between link maintainers and the FCC. We cannot appreciate this balance as well as the commission, but would like to provide some comments for a more clear rule. There are many cases in which fade is going to be more present in some areas than others, especially in rural long-link areas that are desperate for communication links.

Here is what we suggest: Instead of an "average" definition for operators choosing adaptive modulation, we suggest that an operator be granted a certain number of hours a year in which to operate at bandwidth levels below the minimum capacity. These "grace hours" should be requested on a per link (or geographic area) basis, and backed with weather data (or other relevant information). The "grace hours" could be tiered based on quality of service. Self-monitoring and certified reporting should be sent to the commission about link bandwidth rates, and the commission should be able to make more in-depth decisions regarding straying from expected numbers on a periodic basis. The operator should be able to reevaluate their necessary "grace hours" if needed (potentially a mandatory hearing after one or two years), and likewise, the commission should be able to make penalty decisions at this time. The commission may wish to lower its reporting requirement and heighten its grace times in rural areas, to incentivize growth.

We recommend that the commission remain lenient in it's policy regarding severe and unpredictable conditions.

We wish we could recommend that "grace hours" be preserved, in situations when service is maintained due to use of an auxiliary fixed station to service a request, but are aware that this policy could lead to abuse.

On the subject of "Permitting Auxiliary Fixed Stations":

We completely support the permission to have Auxiliary Fixed Stations, for the reasons outlined in the above section "Mimvi's Vision of Implementation in The New Mobile World." We also, favoring stable connectivity over enhanced connectivity, agree with the commission that they should be secondary to the main link.

We do urge the commission to clarify that they would allow auxiliary stations to communicate with each other, but not through the frequencies assigned to the main link and auxiliary station. We don't believe it's the intent of the commission to block communications of auxiliary stations through land links or other non-interfering methods. We do recommend that the commission collect voluntary reporting of all direct land links between backhaul auxiliary stations, for future analysis.

We would also like to see the commission encourage a single auxiliary station to be permitted to communicate with more than just one primary link, if more than one happens to be in a geographically similar area. We feel that this would increase the likelihood of auxiliary stations being useful in outages and severe weather patterns.

On the subject of "Modification of Efficiency Standards in Rural Areas":

We support relaxation of requirements in rural areas to encourage growth. We do feel that these relaxed standards should be revisited on a periodic basis, as rapid growth in telecommunications should be noted in between census periods.

On the subject of "Review of Part 101 Antenna Standards":

We support all proposals to minimize cost of auxiliary station deployment, but defer to the judgement of wireless

equipment manufacturers and deployers in their more technical suggestions.

On the subject of "Increasing Flexibility Generally":

Flexibility in regulation is a difficult question to handle while dealing with businesses that rely on standardized rules in making expensive tower placement decisions. We feel that the commission should be very flexible in allowing primary link operators to grow communities of auxiliary stations, but would like to maintain that the primary link is the priority.

Conclusion:

We would like to thank the commission for granting us this opportunity to comment on the above matter, as well as for taking the time to review and make changes to the current rules. We would also like to thank Alcatel-Lucent (NYSE:ALU), Dragonwave, Inc. (NASDAQ:DRWI), Ericsson, Inc. (NASDAQ:ERIC), Exalt Communications, Fixed Wireless Communications Coalition (FWCC), Harris Stratex Networks (NASDAQ:AVNW) and Motorola, Inc. (NYSE:MOT) for filing the petition and assisting the FCC as well.

/s/ Kasian Franks

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Exhibit A

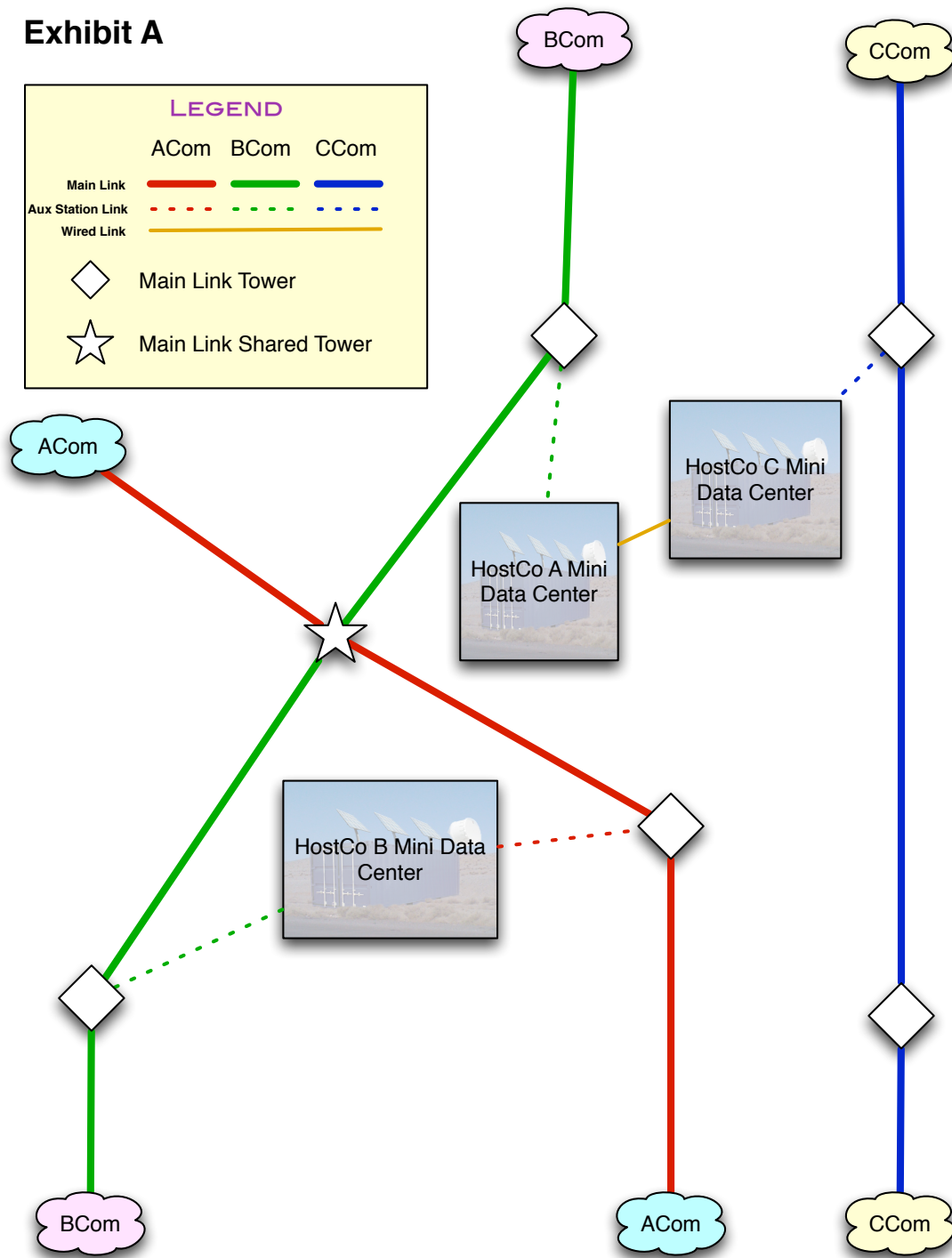
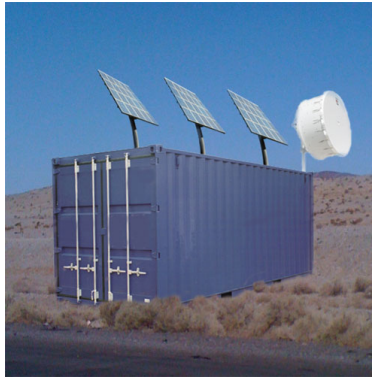


Exhibit B



Example Very Low Cost Mini Data Center:

Using recycled ISO Shipping Container
& Solar Power

Could support IPTV, VoIP, SaaS and local
caching for a small to medium sized town,
properly loaded with computational and
storage hardware.

(Note, no subterranean cooling or HVAC
present in image)

Exhibit C

